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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,400	11/04/2003	Peter A. Quigley	FPY-048C3	5827

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GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
EXCHANGE PLACE
BOSTON, MA 02109-2881

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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06/27/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/700,400	Applicant(s) QUIGLEY ET AL.	
	Examiner Elizabeth M. Cole	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-67 of U.S. Patent No. 5,921,285 in view of Charboneau, U.S. Patent No. 5,551,484. US '285 claims a spoolable composite tube comprising a substantially fluid impervious inner liner, a first composite layer enclosing said liner and formed of fiber and matrix, said first composite layer having a first fiber extending helically and have a second clockwise extending fiber and having a third counter clockwise extending fiber, such that said first fiber is interwoven with a least one of said second fiber and said third fiber, and a first energy conductor embedded in and extending along the length of said spoolable composite tube. US '285 differs from the claimed invention because it does not disclose that the tubing comprises a sensor. Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further

comprises a capacitance leak detection circuit in the liner. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of US '285, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

3. Claims 1-37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 5,888,601 in view of Charboneau, U.S. Patent No. 5,551,484. US '601 claims an axially extending tubular composite member having a plurality of plies comprising at least one interior ply having at least one biaxial fiber component with a matrix material, at least one intermediate ply having at least one axially extending fiber component disposed within said matrix material and at least one external ply having a woven fiber component with threads oriented parallel to said longitudinal axis and threads oriented transverse to said longitudinal axis, (claim 1), wherein said fiber component of said intermediate ply includes a first axial fiber and second and third fibers each oriented diagonally relative to said first fiber, so that said first, second and third fibers together form a triaxial fiber component. US '484 does not claim a substantially impervious pressure barrier layer, or the claimed energy conductor and sensor. Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit

in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of US '285, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

4. Claims 1-37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-30 of U.S. Patent No. 6,357,485 in view of Charboneau, U.S. Patent No. 5,551,484. US '485 claims a spoolable composite tube comprising an fluid impervious pressure barrier layer, and a composite fiber layer. The composite fiber layer can comprise helical fibers which are braided with other fibers which corresponds the claimed composite layer. US '485 differs from the claimed invention because it does not claim the energy conductor or the sensor. . Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of US '485, motivated by the

expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1-37 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6,148,866 in view of Charboneau, U.S. Patent No. 5,551,484.

8. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Quigley et al '866 discloses a composite spoolable tubing comprising a substantially fluid impervious pressure barrier layer, a composite layer comprising a triaxial braid layer which corresponds to the claimed composite layer and an energy conductor. col. 4, lines 5-23, col. 5, lines 57-65. Quigley '866 differs from the claimed invention because it does not disclose the claimed sensor. . Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley '866, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

9. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6,286,558 in view of Charboneau, U.S. Patent NO. 5,551,484.

10. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Quigley '558 discloses a composite spoolable tube comprising an inner pressure barrier layer, a composite layer having a triaxial braid structure and an energy conducting extending at least part of the length of the tube. See col. 5, lines 5-67. . Quigley '558 differs from the claimed invention because it does not disclose the claimed sensor. . Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be

connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley '558, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

11. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6,357,485 in view of Charboneau.

12. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Quigley et al '485

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discloses a composite spoolable tubing comprising a pressure barrier layer and a composite fiber matrix layer, wherein the fibers can triaxially braided and an energy conductor extending at least part of the length of the tubing. See col. 4, lines 1-58; col. 5, lines 11-col. 6, line 19. Quigley '485 differs from the claimed invention because it does not disclose the claimed sensor coupled to the tube. Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley, '485, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

13. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6,604,550 in view of Charboneau, U.S. Patent NO. 5,551,484.

14. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an

invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Quigley '550 discloses a composite spoolable tubing comprising an impervious pressure barrier, a triaxially braided composite layer and an energy conductor extending part of the length of the tubing. See col. 5, lines 5-col. 6, line 14. Quigley '550 differs from the claimed invention because it does not teach a sensor coupled to the wall of the tubing. . Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley, 550

motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

15. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being obvious over Quigley et al, U.S. Patent NO. 6857452 in view of Charboneau, U.S. Patent NO. 5,551,484.

16. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Quigley '452 discloses a composite spoolable tubing comprising an impervious pressure barrier, a triaxially braided composite layer and an energy conductor extending part of the length of the tubing. See col. 5, lines 6- col. 6, line 20. Quigley '452 differs from the claimed invention because it does not teach a sensor coupled to the wall of the tubing. .

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Charboneau discloses a lining for pipelines which may include an optical fiber which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. Charboneau further teaches that such linings can comprise an impervious barrier layer. Charboneau teaches that the optical fibers can be connected to a stresses detector to monitor the liner when it is installed in a pipeline. See col. 4, lines 1-61. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Quigley,'452 motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems.

17. Applicant's arguments have been considered but are moot in view of the new grounds of rejection. The indicated allowability of claims 1-37 is withdrawn in view of the rejections set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

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/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

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